

## **BEST MANAGEMENT PRACTICES TO PROTECT OUR SEWER FROM FATS, OILS AND GREASE**

Fats, oils and grease (FOG) is a constant food service management issue. FOG going down into a facility's drain system from ware washing, floor cleaning, and equipment sanitation can be intercepted in the grease trap if conditions are right. If FOG passes through the grease trap into a sanitary sewer system - neither designed nor equipped to handle the FOG - accumulation will occur inside of pipes, manholes, and lift stations. Sanitary sewer obstructions and overflows (SSOs) are in-part the result of FOG pipe blockages from residential, institutional and commercial sources. The best way to manage FOG is to keep the material out of the plumbing system drains. The following best management practices suggestions will help minimize FOG discharges.

### **Practice Dry Clean-Up**

Removing food waste materials by methods such as scraping or wiping before using water will capture FOG containing residues before they go down the drain. Washing before any dry clean-up will flush the FOG along with other high-strength waste. Grease traps may have to be pumped more frequently if dry clean-up techniques are not followed. Never allow any quantities of FOG to be poured down the drain. Never allow food scraps to be disposed of down any drain. Staff education and availability of the tools for removal of food waste before washing will boost the success of dry clean up.

#### ***To practice dry clean up:***

- Use rubber scrapers to remove fats, oils and grease from cookware, utensils, chafing dishes, and serving ware.
- Use food grade paper to soak up oil and grease under fryer baskets.
- Use paper towels to wipe down work areas.

### **Spill Prevention**

Preventing spills will help reduce the amount of food preparation waste and areas that require clean up. Properly designed containers are necessary for spill prevention. Safety will be enhanced with fewer slips, trips and falls.

#### ***For spill prevention:***

- Empty containers before they are full to avoid spills.
- Use a cover to transport interceptor contents to a rendering barrel.
- Provide employees with the proper tools (ladles, ample containers, etc.) to transport materials without spilling.

### **FOG Maintenance**

Equipment used to pump, collect, filter and store cooking oil has to work properly every time or spills can occur. Ensure that all FOG management equipment is regularly maintained. An adequate number of staff should be trained to operate oil supply, filtration and waste collection equipment. Ergonomic containers should be available to protect worker safety. Daily and weekly maintenance schedules are highly recommended so FOG equipment is well managed.

#### ***Best Management Practice Ideas:***

- Outdoor waste oil containment that is exposed to stormwater will need special attention, because spills and poor housekeeping in this location can result in a stormwater violation.
- Hood oil catch pans should be frequently dumped into waste oil and grease container to prevent overflow drips.

Contract with a management company to professionally clean large hood filters. Small hoods can be hand-cleaned with spray detergents and wiped down with cloths. Hood filters can be cleaned by spraying with hot water, using little or no detergents, with the captured water discharged to a grease trap (this concentrated FOG will separate well in the grease trap). Afterwards filter panels can go into the dishwasher for complete cleaning with detergents.

- Skim/filter fryer grease daily. Change oil when necessary. Use a fryer oil test kit (from your food service distributor) rather than simply a “guess” to determine when to change oil. This extends the life of both the fryer and the oil.
- Develop a rotation system if multiple fryers are in use. Designate a single fryer for products that create high levels of deposits – filter that one more often.
- Used fryer oil should be collected in a waste oil tank to be held until transport for recycling.

### **Waste Oil & Grease Collection Container**

- Waste cooking oil and grease is a valuable commodity if it is handled properly.
- Companies collecting these materials will pay for clean, water-free product.
- Storage containers kept outside need to be secured to prevent theft or vandalism.
- Storage containers should be storm secure to prevent seepage of water into the container.

### **FOG + Food Waste**

- Food waste container can receive food wastes that contain residuals of cooling oil and grease that is not feasible to separate.
- Empty grill top scrap baskets and scraping boxes into food waste container.
- Do not allow any food wastes to be discharged into any sinks – it belongs in the food waste container.

### **Grease Trap / Interceptor**

- Effective grease trap / interceptor operation requires: time for oil to separate from water; temperature low enough for grease to congeal; turbidity limited so that separated FOG will not re-mix into the flow through water; and pH is not too high from use of too much cleanser, keeping oils in an emulsion that passes through the grease trap and into the sanitary waste piping.
- Cleaning intervals depend upon the size and type of food establishment involved - removing all liquids and solids and scraping the walls maintains the full operating capacity of the interceptor.
- Complete removal of organic solids sediment on the bottom is as important as removing the grease at the top, so pumping frequency is in-part determined by how thick this layer accumulates between service intervals. Full contents of the grease trap or interceptor must be removed, partial cleanouts are not effective in preventing fouling of downstream piping.
- Under-sink grease interceptors will require dedicated devices and / or containers to safely service these systems.
- During servicing of the grease trap, make sure it is inspected to verify condition of sanitary tees and baffle penetrations.
- Make sure that all grease-bearing drains discharge into a grease trap: mop sinks; woks; wash sinks; prep sinks; utility sinks; pre-rinse sinks; dishwashers; and all food preparation area floor drains.
- Make sure that no lavatory wastewater is plumbed to the grease trap.
- Restaurants that would like to clean their own grease interceptors must have a septage management firm conduct the work.

After an obstruction is cleared, provide a camera inspection of the building sewer lines all the way to the public sewer lines to confirm that the obstruction has been cleared a not just pushed further downstream.